#### Publication of Patent Application

#### Showa 55-168359

#### **Practically Novel Design Registration Application**

Showa 54 May 21st

#### Patent Office Chief

1. Design Name

#### Fog-Proof Mask

#### 2. Inventors

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Seal

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#### 5. Registration of the attached documents

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#### JP 55-168359

[Note: Very poor copy quality, almost illegible. Names, addresses, company names and brand names are translated in the most common manner. Japanese language does not have singular or plural words unless otherwise specified by a numeral prefix or a general form of plurality suffix.]

#### Detailed description of the Invention

#### 1. Name of the Invention

#### Fog-Proof Mask

#### 2. Scope of the claims of the practically novel design

A fog-proof mask that is a mask body, which has a transparent viewing window, where an anti-fogging agent is coated on the transparent viewing window, and on this coated surface a film is adhered.

#### 3. Detailed Explanation of the Design

In the case of respiration (breathing) masks used in people operating in locations where there is a generation of toxic gases, like rescuers or coal miners, etc., miners, at the time when there are worn on and used, there are many instances when fogging of the transparent viewing window occurs through the breathing of the person who wears them, and the transparent viewing becomes difficult.

In order to eliminate such drawback, in the past, immediately prior to using the respiration mask, it has been introduced into a container and an anti-fogging agent has been coated on the transparent viewing window, and then the mask has been put on. However, in the case of such fog-proofing method because of the fact that manual handling is necessary for the coating of the anti-fogging agent, it is not appropriate for using and wearing in emergency situations, and it is not used in emergency situations. Also, immediately after the anti-fogging agent has been coated it has exceeding flowability properties, and the anti-fogging agent flows quickly and falls, and because of that there has been the drawback point that it has been said that the anti-fogging effect can be sustained for only a short period of time.

The present design (invention) is an n invention that suggests an anti-fogging mask in order to solve the above described previous technology drawback points.

Here below, based on the presented diagrams, the practical implementation examples of the present design are explained, and there are the following: (1) is the mask body, (20 is the transparent viewing window where a transparent plastic plate or a glass plate are placed, (3) is the breathing tube that introduces oxygen or purified air in the inside of the

mask body (1), (4) is the breathing tube that expels to the outside of the mask body (1) the air that has been breathed by the person wearing on the mask body (1), and the speaking plate (5), (6) is the anti-fogging agent coated on the inner surface of the transparent viewing window (2), (7) is the resin film that is adhered onto the coated surface of the anti-fogging agent (6).

In the case of the anti-fogging mask that has a structure formed according to the above described, it can be stored and kept in a state where the resin film (7) has been adhered onto the anti-fogging agent (6) coated on the inner surface of the transparent viewing window (2), and in an emergency situation etc., the film (7) can be peeled off and removed and the mask can be used and worn on.

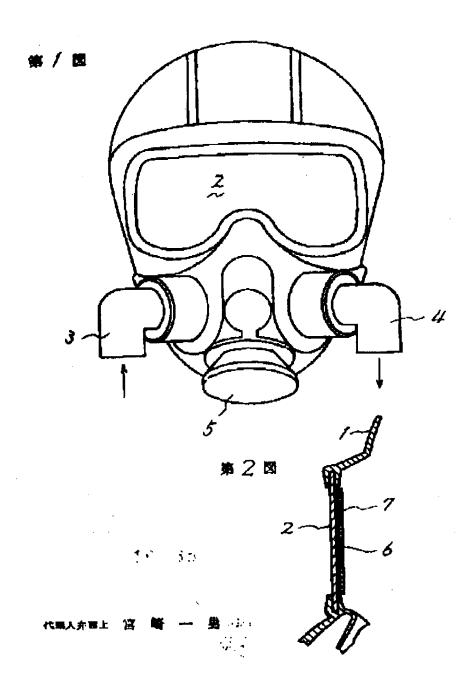
According to the present invention, besides the mask body that is shown according to the above-described practical example, as long as it is mask body that has a transparent viewing window, it can be used in any inside water, or on land, etc., locations. Also, besides respiration devices, it can be appropriately used in other types of applications. Also, regarding the anti-fogging agent, its coating is not limited to only the inner surface of the transparent viewing window, and it is also possible to be coated on the outer surface, or on both the inner and the outer surfaces and these are good options. Regarding its coating, besides the method whereby the anti-fogging agent is coated on the transparent viewing window and after that the film is adhered, it is also a good option if the method is used where it is coated on the film material and this film is adhered so that its coated surface is pressed against the transparent viewing window.

The present invention has a structure as described here above, and at the time of the use of the mask, only the film is removed and it can be used and because of that even in emergency situations it is ready to be used within a satisfactory time period and thus is appropriate to use in emergency cases. Also, a film material is adhered onto the coated surface of the anti-fogging agent and because of that during the storage of the mask the anti-fogging agent absorbs moisture and the decrease of the anti-fogging effect is prevented and not only that but also the scratching or damage of the surface coated with the anti-fogging agent is prevented and the dispersing of the anti-fogging agent is prevented. Also, at the time when the film is adhered the anti-fogging agent is firmly adhered onto the transparent viewing window and because of that even when the film is removed it does not easily flow and fall, and compared to the case where, according to the previous technology, the anti-fogging agents is sprayed on the transparent viewing window prior to the use of the mask, it is possible to maintain the anti-fogging effect for prolonged period of time, etc., various results are achieved.

#### 4. Brief Explanation of the Figures

Figure 1 represents a front view of the anti-fogging mask according to the present invention. Figure 2 represents an enlarged sectional view diagram of the transparent viewing window of the same mask.

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# 公開実用 昭和55—168359



## 実用新案登録願

(4,000円)

昭和54年5 月21日

特許庁長官 篇 卷 二 殿

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5. 添付書類の目録

ン(1) 明 細 書 1週

(2) 図 (541 21 ) (4) 委 任 (計劃第二次

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#### 明 無

- 1. 者髪の名称 防暴マスク
- 2. 実用新架登録請求の範囲

病視想を有するマスク体において、透視窓に防 無動を徐布し、その徐布師にフィルムを貼り付け て成る防拳マスク。

3.老事の群細な説明

火災環場に出動する敷助防胃や炭坑などで働く 坑夫。その他有番ガスが発生する環場で作業する 者などが着用する呼吸マスクは、着用時に着用者 の呼気により透視態が舞り、透視が依頼になるこ とが多いものである。

このような欠点を除去するため、従来は呼吸マスクを使用する声前に、容器に入っている防禁剤を活性をあっていたが、このような防禁方法では、防禁剤の整布に手間取るため、 監想の着用に間に合わず、非常に不便であり、また防禁剤を整布した直後は非常に流動性があり、 防禁剤が早く流れ落ちるため、防禁効果の持続が 短いという欠点があった。

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本者参は、上記従来の諸欠点を解消しうる防棄 マスクを提供しようとするものである。

以下製而にもとずいて本客外の実施例を説明すると、(1)はマスク体で、予明なブラスチック板やガラス板をはめた洗視窓(2)と、マスク体(1)内へ酸素や清浄な空気を供給する吸気管(3)と、マスク体(1)の番用者の呼気をマスク体(1)外へ排出する呼気管(4)と、伝声板(5)とを有する。(6)は透視窓(2)の内面に能布した防養剤(6)の塗布面に貼り付けた樹脂(する)

上記の構成より成る防傷マスクは、透視窓(2)の内面に節布された防機剤(6)に樹脂フィルム(7)を貼り付けた状態で保管して働き、緊急使用の場合などにフィルム(7)を剝削して着用する。

本考察においては、上記案施例に示したマスク体のほか、透視窓を有するマスク体であれば、水中、陸上を問わずどのような場所で使用するものも毎日することができる。また呼吸器以外の各种用途に使用するものも毎日することができる。また、防御剤は、透視窓の内面に限らず、外面または



内外面面に塗布してもよく。その終布は、透視窓に塗布してからフィルムを貼り付けるほか。フィルムに塗布し、そのフィルムの塗布面を透視窓に押しつけるようにして貼り付けてもよい。

4.関節の簡単な説明

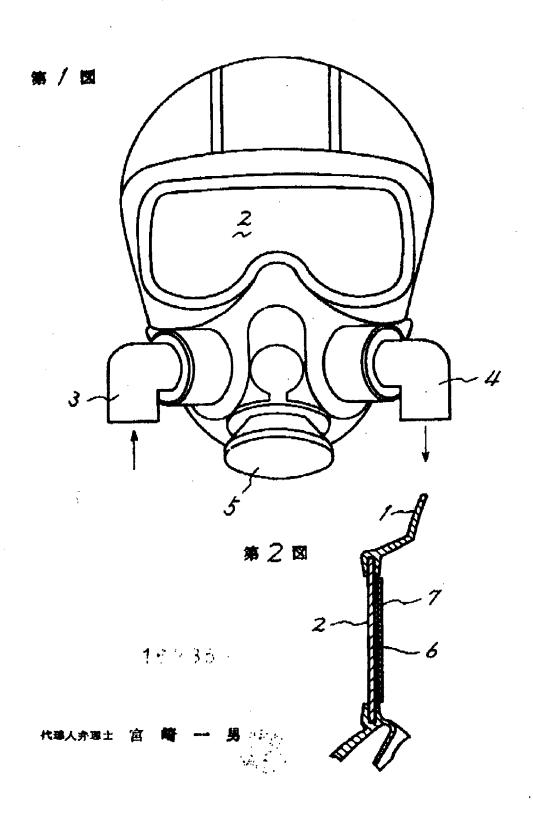
無1 図は本差界に係る防備マスクの正面図。等 2 数は間マスクの透視窓の拡大断面図である。

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(1) …マスク体。(2) … 誘視窓。(6) … 防 参削。(7) … 樹 脂 フィルム。

実用新家登録物 木 場 秀 文 代理人 弁理士 宮 崎 一 男



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